HB 689 Biodiesel Study Commission Meeting Minutes August 28, 2008 1:00 p.m. to 3:00 p.m.

The meeting was held at the Dept. of Environmental Services, 29 Hazen Drive, Concord, NH

Present at the meeting:

Rep. David Borden (Chair); Sen. Harold Janeway; James Robb; Joe Broyles; Ivor Freeman; Becky Ohler; Dan Evans; Joel Anderson; Tom Jelley; Dick Uncles; Melinda Treadwell; Chris Langville; Dorn Cox; Barclay Jackson; Barbara Bernstein; Ihab Farag. DES Commissioner Tom Burack attended for a short while.

Chairman Borden briefly reviewed events at the July 23, 2008 Granite State Clean Cities Coalition meeting during which an open forum was held to seek ideas from stakeholders on issues the HB 689 Commission should address in the current session. Attached is a summary of the ideas from that meeting. They have been grouped into categories, but otherwise not changed from the direct input at the meeting. They fall into general categories of:

- Public awareness and support for biodiesel
- Financing NH biodiesel production
- Small scale agricultural production
- State fuel purchase follow up
- Developing and supporting new technologies

Brief discussions occurred for each area.

1. Public Awareness and Support

Should we make marketing efforts broader - biofuels versus biodiesel?

- Discussion focused on issues associated with biofuels, generally ethanol, which are negative. Should we tie them together. Need to discuss further.

Should education efforts focus on the general public, or on those who sell and distribute biodiesel?

- distributors themselves still need education, and that they are the ones that need to be directly educating their customers. Evans held informational sessions for potential customers, bringing in local users and experts. They created marketing materials specific to biodiesel. It would be possible to put together a "traveling road show" that could target municipalities, schools, and fleets. Need to make sure that there is fuel available in a given area before efforts are made to create demand. There are significant delivery issues with fleets that have small fuel tanks. Cannot always cost effectively get them biodiesel blends.
- lack of understanding at the municipal level, planning boards/zoning boards, caused significant delays in getting the Keene production/testing facility approved. Need to educate those who have to approve production facilities. Dr Treadwell pointed out that a

very important element in getting approval was the Fire Chief's strong endorsement. Any "road show" should include outreach to fire departments.

- mobile processing units could be utilized to help this process. Currently, Dorn Cox is has a portable/trailerable processing unit that could be incorporated into the "road show" although it may be too large and too expensive. An smaller "desktop" version could be pursued.
- -Regional efforts could be investigated.
- -The Keene State project of a community scale brown grease facility (in Nashua) provides a possible educational "display" that would involve field trips rather than road shows. Dr. Treadwell will be setting up a tour for the Commission in the fall.
- connection of biodiesel to environmental initiatives (25x25 and Climate Change). See VT report available at http://www.vermontagriculture.com/energy/index.html.

2. Financing Biodiesel Production

Chairman Borden offered a brief review of the cost of resources - virgin oils are very high, and even waste grease costs are high enough that by the time the raw material is processed it is not cost-competitive

- the answer could be vertical integration changing the basic business model
- this works esp. well on community scale operations
- Blue Sun in CO is doing this, they own and operate everything from the crops to the fueling stations
- large pools of "green" investor money available, but generally looking for larger projects than community based production. Could perhaps try to bundle projects to apply for funding
- cost of production is primarily feedstock and labor, not so much the capitol equipment.
- crux of the problem is getting the feedstock to the plant, then the final product back out to users
- setting up the business model and rationalizing the process is essential
- on the production end requiring only ASTM quality fuel is essential for the entire industry. (there was some input from the GSCCC session that the Commission revisit SB522 and remove requirement for biodiesel to be used for home heating to meet ASTM) Consensus by the group that all fuel sold in the state should meet ASTM)
- the 2009 Farm Bill may have grant opportunities. See http://www.ers.usda.gov/FarmBill/2008/Titles/TitleIXEnergy.htm

3. Small Scale Production

- 1st commission reviewed available land how much could be used for biodiesel feedstock without disrupting existing market? Est. 2 to 5 million gal/yr. This would be based on current production levels and rotational planting. May need to look more at this number.
- are there any steps the study commission can take to make farm operations easier to start or continue? One suggestion is to help increase and develop the market for livestock feed and for culinary oil. That would increase the value per acre of growing the seedcrops and therefore make farmers more interested in converting hay fields to oilseed fields. Again, this points to increasing the knowledge base through education.

- not sure if there are any barriers to developing farm cooperatives that would share equipment. Dorn Cox will consider ways to increase small s ale permitting for on-farm value-added processing.
- there are tax burdens in the form of taxes on capital equipment as well as structures. There is a state statute that allows for "local option tax exemption" that exempts some renewable fuel equipment from local property taxes. Could review this to see about including equipment and structures used to produce renewable fuels.
- economic models need to include benefits that are external to the farm
- 4. State Purchase of Biodiesel
- overview of state bidding system, distribution network issue of small tanks and difficulty in getting supply in some areas
- SB522 requirements effective Jan 1, 2009. DES/DOT/DAS (state purchasing agency) will be getting together to discuss how to do bid.
- DAS only looks at *price*. DOT will need help evaluating the *cost* of the biodiesel blend. It is likely to be a higher price than diesel, but if the benefits of biodiesel (lubricity, wear and tear, environmental) can be somehow factored in, then the *cost* of the fuel may be on par or less than diesel. The DOT commissioner may need the backing of the HB689 study commission to justify purchase of B5 at a higher price.
- City of Keene and KSC can help provide support for maintenance benefits and health benefits
- need to address fuel bidding process. With local supply coming on line how can the state take advantage of the potential lower cost of the local supply?

5. New Technologies

- Ihab Farag provided a short slide show on the current status of biodiesel from algae. There is still much research to be done and it is not yet commercially viable.
- The commission will have one meeting dedicated to discussing support for emerging technologies.

Attendees were asked to get back to Chairman Borden in the coming week with areas that they would like the commission to spend time on, questions that need to be answered, etc.

Meeting Schedule	Location
Sept. 11 th	Office of Energy and Planning - 4 Chenell Drive, Concord, NH
Sept. 25 th	Office of Energy and Planning
Oct. 9 th	Office of Energy and Planning
Oct. 23 rd	To Be Determined
Nov. 6 th	Office of Energy and Planning
All meetings are scheduled for 1:00 p.m.	